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**Developmental Paper for
24th UK Academy for Information Systems International Conference**

Factors Influencing Knowledge Management Practices in Academic Libraries: A Developmental Paper

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Abstract

This developmental paper provides an overview of the factors influencing knowledge management (KM) practices in academic libraries as currently understood and presented in the literature. Important here is the discussion pertaining to organizational culture, KM strategy development and the role of information communication technology in KM within academic libraries as critical factors. The paper also presents an overview of KM by clarifying the necessary terminology from relevant studies in the literature that have focused on KM. Factors which are regarded in the literature as contributing to the failure of successful implementation of KM practices are also discussed.

Keywords: organizational culture, KM strategy, ICT Infrastructure

1.1. Introduction

The present study will be conducted at a time when KM is gradually acquiring significance for academic libraries. The study explores significant and critical factors as enablers and influencers of KM in academic libraries. In identifying the factors that influence KM the study also attempts to identify challenges and related benefits of the practices of KM in academic libraries. It is also important for the purposes of this study to understand how library professionals, staff and management perceive the practice of KM.

Despite the fact that other studies have researched this area - KM in academic libraries (Sarrafzadeh et al., 2010; Kim & Abbas, 2010; Tripathi and Kumar, 2010) - there is still a limited amount of literature which library professionals can readily use for a better implementation of KM.

In light of this investigative focus, these study seeks to answer the following research question:

What are the factors that affect KM practices in academic libraries in relation to KM strategy, organizational culture and information and communication technology infrastructure?

1.2. How is KM Conceptualized in the Literature?

KM is applicable to the utilization of an organization's knowledge and ensures that there is an effective practice of knowledge, enhanced organizational performance and behavior through the creation, coding storage, acquisition, application and sharing of knowledge (Ghani, 2009). Knowledge as a significant and intangible asset that aids in the success of an organization in terms of performance and productivity (Raula, Vuksic & Stemberger, 2012) needs adequate and effective storage, identification, dissemination and retrieval within organizations so as to achieve a competitive edge in a sustainable manner (King, 2009). KM has a multidimensional form that is specific and essential to individual performances in an organizational system (Koudouovoh, 2014). In this regard, organizations have to devise strategies to change tacit knowledge into explicit knowledge so as to derive maximum benefit from the intellectual capital of the organization (Omotayo, 2015).

The practice of KM is also viewed as a potentially viable solution to the existing challenges being experienced by professionals within information organizations (Sarrafzadeh, Martin & Hazeri, 2010). The practices of KM are significant for organizations and companies as they assist the management in promoting knowledge dissemination, knowledge acquisition and the retention of intellectual capital (Sunassee & Sewry, 2011). In addition, the practices of KM have been linked with an organization's success; Mikulecky & Lodhi (2009), state that

organizations are most successful when they incorporate the practices of KM as part of every organizational member's responsibility.

1.3. KM in Academic Institutions and Libraries

Academic libraries are viewed as knowledge-generating organizations and also as a system of integrated practical activities and business processes that collaboratively operate for the purposes of facilitating and accomplishing the general goals and objectives of an organization (Daneshgar & Parirokh, 2007). According to Kim & Abbas (2010) academia inspires knowledge creation and knowledge transmission, and academic libraries have been found to play a key role in supporting organizational activities. Additionally, knowledge development and information explosion encourages innovative methods in respect of the management and implementation of the right to knowledge (Ifijeh, 2010).

Mosha (2017) has outlined the use of KM in academic libraries by stating that KM within academic libraries is not only concerned with the management and/or systematic arrangement of journals, books or the organization of the flow and exchange of materials, but that it also involves the improvement of organizational knowledge that is possible through enhanced KM practices and organizational learning. In view of this, different organizations including academic libraries have utilized KM practices for a number of reasons such as to improve the organization's performance and problem-solving processes (Lin, 2014).

Librarians are viewed as creators of knowledge through their active role in content management, knowledge organization and the assessment of the reliability and validity of information derived from undisclosed sources. In addition, librarians present value sets that are essential to scholarly survival, and they also care more about the accessibility and

understanding of academic resources that are significant and relevant to different disciplines (Case, 2008).

2.1. Factors that Influence KM Practices in Academic Libraries

The literature reports a number of factors that are considered to have an influence on KM practices in academic libraries. According to Kumaresan (2010), technological factors are significant in determining whether or not there is a need to use advanced software in academic libraries as opposed to simply utilizing the available and existing technology in implementing KM practices (Ali, Sulaiman & Cob, 2015; Jennex & Olfman, 2006).

Structural organizational factors which include decentralization limits, hierarchy and permeability of borders between roles, divisions and sectors, influence the practice of KM in academic libraries (Hasgall & Shoham, 2008). Other factors include KM strategies needing to be implemented in line with library objectives and strategies (Dulipovici & Robey, 2012). A well-designed implementation of knowledge-based strategy (Daud & Hassan, 2008) as well as committed and strong leadership from the topmost management (Kumar, 2010; Abokhodiar, 2014) are important for successful utilization of KM in academic libraries.

Various other factors have further been identified in relation to the sharing of knowledge and the shaping of individual behavior. These factors touch on user satisfaction (e.g. Panigrahi, Zainuddin & Azizan, 2014), employee motivation (e.g. Ali, Sulaiman & Cob, 2015; Abokhodiar, 2014), positive group behavior (e.g. Mamta & Jayanthi, 2012), individual behavior (e.g. Gautam, 2012) and the policies of the organization (e.g. Agarwal et al., 2012). Employee training is also considered an important factor as it helps sensitizing employees to

the importance of KM in organizations and particularly in academic libraries (Pham & Hara, 2009).

2.2. Organizational Culture

Organizational culture is composed of corporate beliefs, individual behaviors, individual beliefs and organizational decision-making process, organizational tasks and hierarchy (Martins & Meyer, 2012).

The implementation of the practices of KM is in constant need of culture-related changes, as such, KM strategies should start from the top management of the organization, which includes modifying the organizational culture. In understanding cultural changes, organizations are able to better understand people's behavior, the reason as to why it is difficult to change organizational settings and the forces that define people (Schein, 2010). The successes of KM is closely related to aspects of organizational culture such as, learning from failures and mistakes, innovations, team work and orientation and collaborations (Wong, 2008).

Organizational culture is important in the institutionalization process according to Gonzalez and Martins (2017). In this view, culture comprises organizational knowledge that is acquired through beliefs and values that are perceived to be authentic across different groups and people. Organizational culture brings together knowledge through routines, hierarchy and patterns (Levy, 2011; Martins & Meyer, 2012). Thus, insofar as organizations are in constant need of knowledge, the need for competence and essential skills to move on with the dynamics of improving and utilizing the practice of knowledge should be embedded in their organizational cultures (Klepić & Madžar, 2017). Organizational culture that is positively acquired is

fundamental in the promotion of learning, knowledge sharing and improving skills (Boh et al., 2013; Irani et al., 2009).

2.3. KM Strategy

Many companies use knowledge strategies based on the capacities and resources that are available to them (Schiuma & Carlucci, 2012). The process of KM includes the level at which a company is able to share, establish and utilise knowledge-related resources within the functional organizational boundaries (Chang & Chuang, 2011). Also, an organization needs to devise an effective structural system that is able to capture and transmit internal knowledge and related practices so as to enhance the establishment of strategies in KM (Oluikpe, 2012; Jasimuddin, 2008). The following KM strategies have become some of the most appropriate and best methods in organizational performance:

2.3.1. Codification Strategy

The codification strategy method enables organizational employees to access and retrieve knowledge that is codified and allows them to share or disseminate the knowledge through electronic gadgets. In this way, the codified form of knowledge is re-used, improved and refined to form an organizational novelty (Zanjani et al., 2008).

2.3.2. Personalization Strategy

The strategy of personalization is basically a person – to - person method and provides customized practical services from organizations that are perceived to have solutions that are optimized to address distinct solutions (Zanjani et al., 2008).

2.3.3. Integrated Strategy

A study by Sarawanawong et al. (2009) suggested the implementation of a KM strategy that conceptualized a hybrid framework for development in academic institutions. The integrated strategy is composed of the personalization strategy and the codification strategy (Choe, 2011). The personalization strategy has a human perspective where individuals play key roles while the codification strategy involves supporting roles and interaction between people and documents (Zanjani et al., 2008). The combined (integrated) nature of this KM strategy makes it more effective in ensuring better implementation of KM practices (Tseng, 2010).

3.1. Information Communication Technology (ICT) and KM in Academic Libraries

ICT plays a significant role in KM, especially in the current knowledge economy. This is because, prior to the employment of the concepts of ICT, the management of both explicit knowledge and tacit knowledge had been experiencing challenges related to knowledge processing, acquisition, storing and retrieval, fatigue of library professionals based on their work volumes and limited forms of motivation on the part of library organizations that led to low drive and unwillingness to achieve effective organizational performance (Enakrire and Ocholla, 2017). Thus, for the implementation of the concepts of ICT for KM to be effected, there is a need to observe the necessary strategies of management practices in academic libraries so as to these enhance KM processes (i.e. knowledge creation, acquisition, storage, dissemination, etc.).

Professionals in information and library management have now become organizers of library services and resources, through the facilitation of seminars and workshops, and are no longer viewed as guardians of knowledge and information (Ridwan 2015). In addition, most librarians

have embraced new practices and approaches in information and KM through the utilization of modern tools of ICT and active involvement in training programs.

4.1. The Failure Factors and Problems of Adopting KM Practice in Academic Libraries

A number of factors have been identified in the literature as leading to the failure of KM practices as well hindering the adoption of KM concepts in academic libraries. These factors are important for consideration by organizations, particularly academic libraries. One of the failure factors is misalignment of strategic KM practices by organizations and academic libraries (Dulipovici & Robey, 2012). Based on the findings of Dulipovici and Robey (2012), KM practices need to be strategically aligned to the strategies of the organization or academic library. Other failure factors have been outlined by Pham & Hara (2009), which include the lack of a strategic framework and appropriate technological concepts for KM practices in academic libraries. Other factors include limited or total lack of awareness of the importance and benefits of KM, which may hinder the adoption and implementation of KM practices in academic libraries (Abokhodiar, 2014). Lack of or limited employee incentives is an additional failure factor according to Abokhodiar (2014), as employees tend to lack the motivation to actively participate the practices in KM and organizational knowledge.

Additional failure factors and problems in adopting KM practices in academic libraries include: over-reliance on technological factors as the fundamental and only solution to an organization's KM; lack of organizational acceptance and fit; lack of understanding of the key limitations and roles of KM practices; limited or total lack of commitment and support from the organization's topmost management and failure to determine the actual needs of the organization (Frost, 2014).

5.1. Conclusion

This developmental paper attempted to provide a concise overview of the concept of KM as studied previously within the context of academic libraries. In the literature KM is presented as significant in shaping academic libraries to be knowledge and information seekers as well as providers. This is coupled with the view that academic libraries have a primary role as the fundamental medium of disseminating knowledge and acting as a repository for knowledge (Kim and Abbas, 2010). The exploratory nature of this study allows for an in-depth examination of the factors that affect KM practices in academic libraries especially in relation to the three main factors presented here, namely: KM strategy, organizational culture and ICT infrastructure. These factors along with failure factors as they occur in the specific context of academic libraries demand more attention especially given the limited number of studies and literature in this area.

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